UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,000	01/03/2001	Bertil Brandin	P00.1982	3129

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EXAMINER
SHECHTMAN, SEAN P

ART UNIT	PAPER NUMBER
2125	

DATE MAILED: 07/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/721,000	BRANDIN ET AL.
	Examiner	Art Unit
	Sean P. Shechtman	2125

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _21 May 2003_ .

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-8_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-8_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _03 January 2001_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Priority

1.   Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

Drawings

2.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they

include the following reference sign(s) not mentioned in the description:

Fig. 8, elements 803-806.

Fig. 9, elements 902, 904-906, and 912, 914-916.

3.   The drawings are objected to because Figs. 9A & 9B are duplicates of each other (i.e., the

reference characters referred to in the specification are labeled differently, however, perform the

same function).

A proposed drawing correction, corrected drawings, or amendment to the specification to

add the reference sign(s) in the description, are required in reply to the Office action to avoid

abandonment of the application. The objection to the drawings will not be held in abeyance.

4.   All other objections are withdrawn due to the amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
subject matter which the applicant regards as his invention.

5.   Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention.

Claim 1 is directed towards a method comprising the step of performing a validation by

automatically verifying an interplay of functionalities in accordance with an input to said

complete process, while not impeding each individual process during an operation. However,

claim 5 is directed towards said method, wherein one or more of the individual processes may be

an impeding processes, thus contradictory to claim 1. The examiner respectfully submits that

claim 5 in conjunction with the subject matter of independent claim 1 sets forth limitations of

both a process which does not include an impeding process and an impeding process, thereby

rendering claim 5 indefinite.

6.   All other rejections are withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1-4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent No. 5,742,823 to Edwards et al.

Referring to claim 1, Edwards et al. discloses a method for designing a control of a

complete process which comprises a number of individual processes (Col. 2, lines 30-48; Col.

13, lines 30-46), said method comprising the steps of:

Identifying functionalities of said individual processes (Col. 14, lines 13-18); Performing a validation by automatically verifying an interplay of said functionalities in accordance with an input to said complete process, while not impeding each individual process during an operation, producing a validation result (Col. 2, lines 23-29; Col. 7, lines 7-18; Col. 13, lines 30-46); and determining data for controlling said complete process from said validation result (Col. 2, lines 30-48).

Referring to claim 2, Edwards et al. discloses the method above further comprising the step of performing a sequence optimization (Col. 13, lines 8-30; Col. 14, lines 51-59).

Referring to claim 3, Edwards et al. discloses the method above further comprising the step of producing data for said control in an executable code from (Col. 5, lines 34-65).

Referring to claim 4, Edwards et al. discloses the method above further comprising the step of controlling individual affected processes by a software unit which is one of said functionalities of said individual processes (Col. 5, line 34 – Col. 6, line 9).

Referring to claim 6, Edwards et al. discloses the method above further comprising the step of controlling individual processes of an automatic placement machine (Col. 2, lines 49-53).

Referring to claim 7, Edwards et al. discloses the method above further comprising the step of controlling the technical installation with data determined for controlling said complete process (Abstract).

Referring to claim 8, Edwards et al. discloses an arrangement for designing the control of a complete process comprising a number of individual processes (Col. 2, lines 30-48; Col. 13, lines 30-46); and a processor unit (Col. 4, line 45 – Col. 5, line 49) configured to provide:

Identification of functionalities of said individual processes (Col. 14, lines 13-18); a

validation, by automatically verifying an interplay of said functionalities in accordance with an

input to said complete process, in a manner such that each of said individual processes is not

impeded during an operation (Col. 2, lines 23-29; Col. 7, lines 7-18; Col. 13, lines 30-46); and

data from a result of said verification that is used for controlling said complete process (Col. 2,

lines 30-48).

Response to Arguments

8.   Referring to claim 5, examiner respectfully disagrees with the arguments made by

applicant. Applicant argues that claim 5 in conjunction with the subject matter of independent

claim 1 sets forth a possibility of both an impeding process and a process which does not include

an impeding process (Page 10, 2nd paragraph of Amendment B). Rather, the examiner

respectfully submits that claim 5 in conjunction with the subject matter of independent claim 1

sets forth limitations of both a process which does not include an impeding process and an

impeding process.

Furthermore, examiner respectfully admits that even though this may be only a *possibility*

because claim 5 is directed to one or more processes that "may" be impeding, examiner asserts

. that the claims must be given their broadest interpretation. Therefore, examiner must assume the

possibility that claim 5 is directed to one or more process that are impeding. Considering this

possibility, the subject matter of claim 5 in conjunction with claim 1 sets forth an impeding

process that occurs *at any time* during the method steps described in claim 1. Examiner notes

that claim 5 does not specify when the impeding process occurs (assuming that one does occur),

therefore examiner respectfully submits one could easily interpret claim 5 in conjunction with

claim 1 as stating that an impeding process occurs during the performing step (Step b) of claim 1.

Therefore, claim 5 in conjunction with claim 1 recites the step of b) performing a validation...,

while not impeding each individual process during an operation while an impeding process

occurs. The metes and bounds of the claim cannot be determined because it is unclear as to

which limitation sought for protection, i.e., a non-impeding process, or an impeding process. It

is for this reason that the previous rejection is maintained.

9.   Applicant's arguments, see Amendment B, filed May 21st, 2003, with respect to claims 1,

3-4, and 7-8 rejected under 35 U.S.C. 102(e), have been fully considered and are persuasive.

The rejection of claims 1, 3-4, and 7-8 rejected under 35 U.S.C. 102(e) as being anticipated by

U.S. Patent No. 6,247,064 to Alferness has been withdrawn.

10.   Applicant's arguments filed May 21, 2003, with respect to claims 1-4, and 6-8 rejected

under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,742,823 to Edwards have been

fully considered but they are not persuasive.

       Applicant argues that Edwards fails to teach performing a validation by automatically

verifying an interplay of said functionalities in accordance with an input to said complete

process, while not impeding each individual process during an operation, producing a validation

result; and determining data for controlling said complete process from said validation result.

Examiner respectfully disagrees with this argument.

       Edwards teaches performing a validation by automatically verifying an interplay of said

functionalities in accordance with an input to said complete process in Fig. 6. The elements a, b,

and c, are inputs to the process. Fig. 6 below clearly shows the functions (i.e., individual

processes or processing elements) f(A), f(B), and f(C) interacting. The particular process is

labeled at element 250, and described as such in Col. 12, lines 24-26. Examiner respectfully

submits that the processing elements assigned functions are individual processes.
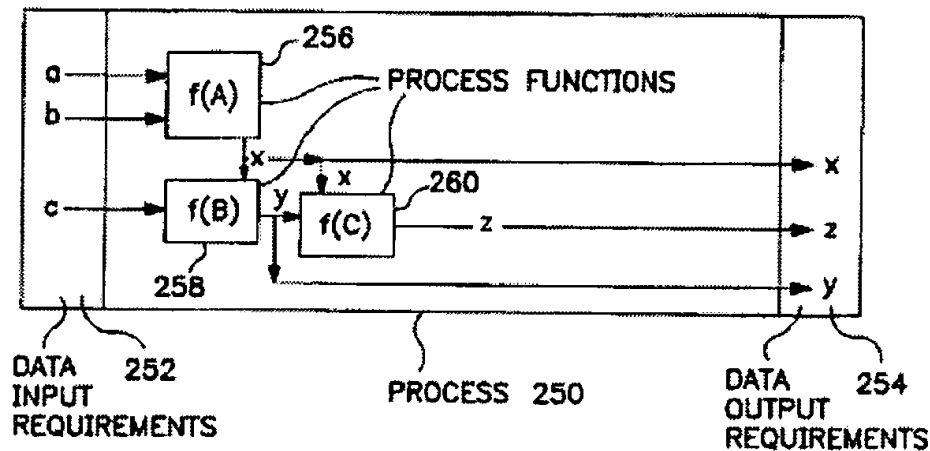

FIG. 6

The application controller monitors these processing elements to insure that all

processing elements are receiving and shipping input data and output data (i.e., interplay) as

desired (Col. 5, lines 9-27). Examiner respectfully submits that insuring (i.e., verifying) the

desired result (i.e., validating is to produce a desired result) of the processing elements

(functionalities) in accordance with input data as shown above is performing a validation by

automatically verifying an interplay of said functionalities in accordance with an input to the

complete process. Edwards goes on to teach how a network structure is organized between the

processing elements, and how this network structure further describes the interaction of the

processing elements (i.e., receiving and shipping of data involved in the validation above) (Col.

6, line 53 – Col. 7, line 6). The claims do not specify what kind of interplay is verified, therefore

the claim limitations are believe to be met.

Edwards teaches how the status of the processing elements are monitored as "available",

"assigned to an application", or "inoperative" (Col. 5, lines 9-27; Col. 6, lines 53-58; Col. 7,

lines 49-65). Examiner respectfully submits that the status verifies an interaction of the

processing elements, because assigning the processing elements to an application to execute a

particular process function (Col. 7, lines 54-56) is establishing a specific network structure (i.e.,

a specific interplay of functions) (Col. 10, lines 13-16). Therefore, examiner respectfully

submits that this status is a validation result, for example, Col. 5, lines 17-23 describes how an

inoperative processor element detected by the controller is replaced with another processor

element to maintain the logical network structure (i.e., interaction of processing elements) of the

process being executed. According to Edwards, this validation is performed automatically and

even during execution of a process (Col. 7, lines 49-65). Therefore examiner respectfully

submits that this validation result is done while not impeding each individual process (i.e., each

processing element) during an operation.

The application controller assigns functions (i.e., data for controlling the complete

process) when the processing element signals "ready" (i.e., available) (Col. 8, lines 1-4).

Examiner respectfully asserts that since the processing elements make up the process and the

application controller assigns functions (i.e., control data) to the processing elements when the

elements signal a "ready" status (i.e., from a validation result) (Col. 8, lines 1-4), these

processing elements (i.e. control data) control the complete process as a result of the status signal

(i.e., validation result).

Edwards specifically teaches that the control means assigns process functions to

processing elements (Col. 2, lines 39-44), and these elements are provided parameters (i.e., data)

for establishing a specified network structure (Col. 10, lines 12-16). Examiner respectfully

submits that because the specified network structure is an integral part of the process control, i.e.,

the specified network structure is included in the process specification and admitted by applicant

as being read by the controller when the processes are to be executed (Page 11 of Amendment B)

(Col. 16, claims 25-26, said process specification is used to execute the process (i.e., data for

control)), then the assigning of processing elements for establishing a specified network (Col. 10,

lines 12-16) is data determined for control of the complete process, the assignments being based

on the validation result described above.

The claims do not specify what data is determined for controlling the complete process,

only that the determination is a result of the validation result. Therefore, examiner respectfully

submits that validating whether or not the processing elements are available for controlling a

particular function of a complete process and assigning a particular function to the processing

elements in a specified structural arrangement based on which processing elements are available

is determining data for controlling the complete process from the validation result.

Conclusion

11.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

12.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Sean P. Shechtman whose telephone number is (703) 305-7798.

The examiner can normally be reached on Monday-Friday from 9:30am to 6:00pm.

       If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Leo P. Picard, can be reached on (703) 308-0538. The fax phone number for the

organization where this application or proceeding is assigned is (703) 746-7239.

       Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-9600.

SPS

Sean P. Shechtman

June 30, 2003

ALBERT W. PALADINI
PRIMARY EXAMINER